

What is claimed is:

1. A roof sheet membrane fastener assembly for securing a roof sheet membrane with a topside release sheet to a roof substrate, comprising:

a mechanical fastener for passing through a roof sheet membrane with a topside release sheet and into a roof substrate overlaid by the roof sheet membrane to secure the roof sheet membrane to the roof substrate; and a disk through which the mechanical fastener passes for contacting and overlaying a portion of the topside release sheet of the roof sheet membrane that immediately surrounds the mechanical fastener and for causing the portion of the topside release sheet overlaid by the disk to separate from a remainder of the topside release sheet when the topside release sheet is removed from the roof sheet membrane.

2. The roof sheet membrane fastener assembly according to claim 1, wherein:

the mechanical fastener comprises an topside head portion and a slender shank portion for passing through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; and the slender shank portion of the mechanical fastener is integral with and depends from the topside head portion of the mechanical fastener and passes through the disk.

3. The roof sheet membrane fastener assembly according to claim 1, wherein:

the mechanical fastener comprises an topside head portion and a slender shank portion for passing through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; the slender shank portion of the mechanical fastener is integral with and depends from the topside head portion of the mechanical fastener and passes through the disk; and at least a bottom side portion of an outer surface of the slender shank portion of the mechanical fastener is formed by a spiral groove whereby the mechanical fastener is designed to be passed through the roof sheet membrane and into the roof substrate by rotating the mechanical fastener.

4. The roof sheet membrane fastener assembly according to claim 1, wherein:



the mechanical fastener is generally U-shaped with two slender shank portions for passing through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; the slender shank portions of the mechanical fastener are integral with and depend from an topside portion of the mechanical fastener that joins the shank portions; and the shank portions of the mechanical fastener pass through the disk.

5. The roof sheet membrane fastener assembly according to claim 1, wherein:

the disk has a peripheral separation means depending from an outer peripheral edge portion of the disk for at least weakening the topside release sheet to facilitate the separation of the portion of the topside release sheet overlaid by the disk from the remainder of the topside release sheet when the topside release sheet is removed from the roof sheet membrane with no or substantially no degradation of the performance of the roof sheet membrane.

6. The roof sheet membrane fastener assembly according to claim 5, wherein:

the peripheral separation means comprises peripheral cutting means for at least partially cutting through the topside release sheet.

7. The roof sheet membrane fastener assembly according to claim 6, wherein:

the peripheral cutting means comprises a series of teeth for penetrating the topside release sheet.

8. The roof sheet membrane fastener assembly according to claim 6, wherein:

the peripheral cutting means comprises a peripheral cutting edge for penetrating the topside release sheet.

9. The roof sheet membrane fastener assembly according to claim 6, wherein:

the peripheral cutting means comprises a series of teeth for passing through the topside release sheet.



10. The roof sheet membrane fastener assembly according to claim 6, wherein:

the peripheral cutting means comprises a peripheral cutting edge for passing through the topside release sheet.

11. The roof sheet membrane fastener assembly according to claim 6, wherein:

the peripheral cutting means of the disk has a depth and the roof sheet membrane fastener assembly is adapted to be used with a roof sheet membrane having a topside release sheet having a thickness greater than the depth of the peripheral cutting means whereby the peripheral cutting means scores the topside release sheet, without passing completely through the topside release sheet, to weaken the release sheet at the peripheral cutting means with no degradation of the performance of the roof sheet membrane, and the release sheet is easily separable at the peripheral cutting means when the release sheet is removed from the roof sheet membrane.

12. The roof sheet membrane fastener assembly according to claim 6, wherein:

the peripheral cutting means of the disk has a depth and the roof sheet membrane fastener assembly is adapted to be used with a roof sheet membrane having a topside release sheet having a thickness substantially equal to the depth of the peripheral cutting means whereby the peripheral cutting means severs or substantially severs the topside release sheet at the peripheral cutting means with no or substantially no degradation of the performance of the roof sheet membrane and the release sheet is easily separable at the peripheral cutting means when the release sheet is removed from the roof sheet membrane.

13. A roof sheet membrane system, comprising:

a roof sheet membrane overlaying a portion of a roof substrate; the roof sheet membrane having a topside major surface that is an adhesive bonding surface and a bottom side major surface that is not adhesively secured to the roof substrate; the topside major surface being overlaid by a topside release sheet;



the roof sheet membrane being secured to the roof substrate by a plurality of mechanical fastener assemblies; each of the mechanical fastener assemblies comprising a mechanical fastener passing through the topside release sheet and the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; and a disk through which the mechanical fastener passes contacting and overlaying a portion of the topside release sheet of the roof sheet membrane that immediately surrounds the mechanical fastener for causing the portion of the topside release sheet overlaid by the disk to be easily separable from a remainder of the topside release sheet when the topside release sheet is removed from the roof sheet membrane.

14. The roof sheet membrane system according to claim 13, wherein:  
each of the mechanical fasteners comprises an topside head portion and a slender shank portion that passes through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; and the slender shank portion of the mechanical fastener is integral with and depends from the topside head portion of the mechanical fastener and passes through the disk.

15. The roof sheet membrane system according to claim 13, wherein:  
each of the mechanical fasteners comprises an topside head portion and a slender shank portion that passes through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; the slender shank portion of the mechanical fastener is integral with and depends from the topside head portion of the mechanical fastener and passes through the disk; and at least a bottom side portion of an outer surface of the slender shank portion of the mechanical fastener is formed by a spiral groove whereby the mechanical fastener is designed to be passed through the roof sheet membrane and into the roof substrate by rotating the mechanical fastener.

16. The roof sheet membrane system according to claim 13, wherein:  
the mechanical fastener is generally U-shaped with two slender shank portions that pass through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; the slender shank portions of the mechanical fastener are integral with and depend from an topside portion of the



mechanical fastener that joins the shank portions; and the shank portions of the mechanical fastener pass through the disk.

17. The roof sheet membrane system according to claim 13, wherein:  
the disk of each of the mechanical fastener assemblies has a peripheral separation means depending from an outer peripheral edge portion of the disk that at least weakens the topside release sheet to facilitate the separation of the portion of the topside release sheet overlaid by the disk from the remainder of the topside release sheet when the topside release sheet is removed from the roof sheet membrane with no or substantially no degradation of the performance of the roof sheet membrane.

18. The roof sheet membrane system according to claim 17, wherein:  
the peripheral separation means comprises peripheral cutting means that at least partially cuts through the topside release sheet.

19. The roof sheet membrane system according to claim 18, wherein:  
the peripheral cutting means comprises a series of teeth that penetrate the topside release sheet.

20. The roof sheet membrane system according to claim 18, wherein:  
the peripheral cutting means comprises an peripheral cutting edge that penetrates the topside release sheet.

21. The roof sheet membrane system according to claim 18, wherein:  
the peripheral cutting means comprises a series of teeth that pass through the topside release sheet.

22. The roof sheet membrane system according to claim 18, wherein:  
the peripheral cutting means comprises an peripheral cutting edge that passes through the topside release sheet.

23. The roof sheet membrane system according to claim 18, wherein:  
the peripheral cutting means of the disk has a depth and the topside release sheet of the roof sheet membrane has a thickness greater than the depth of the



peripheral cutting means whereby the peripheral cutting means scores the topside release sheet, without passing completely through the topside release sheet, to weaken the release sheet at the peripheral cutting means with no degradation of the performance of the roof sheet membrane, and the release sheet easily separates at the peripheral cutting means when the release sheet is removed from the roof sheet membrane.

24. The roof sheet membrane system according to claim 18, wherein:

the peripheral cutting means of the disk has a depth and the topside release sheet of the roof sheet membrane has a thickness substantially equal to the depth of the peripheral cutting means whereby the peripheral cutting means severs or substantially severs the topside release sheet at the peripheral cutting means with no or substantially no degradation of the performance of the roof sheet membrane and the release sheet is easily separable at the peripheral cutting means when the release sheet is removed from the roof sheet membrane.

25. A method of forming a roof sheet membrane system, comprising:

overlaying a portion of a roof substrate with a roof sheet membrane; the roof sheet membrane having a topside major surface that is an adhesive bonding surface and a bottom side major surface that is not adhesively secured to the roof substrate; the topside major surface of the roof sheet membrane being overlaid by a topside release sheet;

securing the roof sheet membrane to the roof substrate by a plurality of mechanical fastener assemblies; each of the mechanical fastener assemblies comprising a mechanical fastener passing through the topside release sheet and the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; and a disk through which the mechanical fastener passes contacting and overlaying a portion of the topside release sheet of the roof sheet membrane that immediately surrounds the mechanical fastener and causing the portion of the topside release sheet overlaid by the disk to be easily separable from a remainder of the topside release sheet when the topside release sheet is removed from the roof sheet membrane; and

removing the remainder of the topside release sheet from the roof sheet membrane after the roof sheet membrane is secured to the roof deck by the plurality of mechanical fastener assemblies to apply an overlying roofing layer.



26. The method of forming the roof sheet membrane system according to claim 25, wherein:

each of the mechanical fasteners comprises an topside head portion and a slender shank portion that passes through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; and the slender shank portion of the mechanical fastener is integral with and depends from the topside head portion of the mechanical fastener and passes through the disk.

27. The method of forming the roof sheet membrane system according to claim 25, wherein:

each of the mechanical fasteners comprises an topside head portion and a slender shank portion that passes through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; the slender shank portion of the mechanical fastener is integral with and depends from the topside head portion of the mechanical fastener and passes through the disk; and at least a bottom side portion of an outer surface of the slender shank portion of the mechanical fastener is formed by a spiral groove whereby the mechanical fastener is designed to be passed through the roof sheet membrane and into the roof substrate by rotating the mechanical fastener.

28. The method of forming roofing the membrane system according to claim 25, wherein:

the mechanical fastener is generally U-shaped with two slender shank portions that pass through the roof sheet membrane and into the roof substrate to secure the roof sheet membrane to the roof substrate; the slender shank portions of the mechanical fastener are integral with and depend from an topside portion of the mechanical fastener that joins the shank portions; and the shank portions of the mechanical fastener pass through the disk.

29. The method of forming the roof sheet membrane system according to claim 25, wherein:

the disk of each of the mechanical fastener assemblies has an peripheral separation means depending from an outer peripheral edge portion of the disk that at least weakens the topside release sheet to facilitate the separation of the portion



of the topside release sheet overlaid by the disk from the remainder of the topside release sheet when the topside release sheet is removed from the roof sheet membrane with no or substantially no degradation of the performance of the roof sheet membrane.

30. The method of forming the roof sheet membrane system according to claim 29, wherein:

the peripheral separation means comprises peripheral cutting means that at least partially cuts through the topside release sheet.

31. The method of forming the roof sheet membrane system according to claim 30, wherein:

the peripheral cutting means comprises a series of teeth that penetrate the topside release sheet.

32. The method of forming the roof sheet membrane system according to claim 30, wherein:

the peripheral cutting means comprises an peripheral cutting edge that penetrates the topside release sheet.

33. The method of forming the roof sheet membrane system according to claim 30, wherein:

the peripheral cutting means comprises a series of teeth that pass through the topside release sheet.

34. The method of forming the roof sheet membrane system according to claim 30, wherein:

the peripheral cutting means comprises an peripheral cutting edge that passes through the topside release sheet.

35. The method of forming the roof sheet membrane system according to claim 30, wherein:

the peripheral cutting means of the disk has a depth and the topside release sheet of the roof sheet membrane has a thickness greater than the depth of the peripheral cutting means whereby the peripheral cutting means scores the topside



release sheet, without passing completely through the topside release sheet, to weaken the release sheet at the peripheral cutting means with no degradation of the performance of the roof sheet membrane, and the release sheet easily separates at the peripheral cutting means when the release sheet is removed from the roof sheet membrane.

36. The method of forming the roof sheet membrane system according to claim 30, wherein:

the peripheral cutting means of the disk has a depth and the topside release sheet of the roof sheet membrane has a thickness substantially equal to the depth of the peripheral cutting means whereby the peripheral cutting means severs or substantially severs the topside release sheet at the peripheral cutting means with no or substantially no degradation of the performance of the roof sheet membrane and the release sheet is easily separable at the peripheral cutting means when the release sheet is removed from the roof sheet membrane.